

Claims

Please cancel claims 2 and 14 without prejudice, and amend Claims 1, 13, 15 and 17 as follows:

1. (*Currently amended*) A multiplexing/ demultiplexing module configured N channels, the module comprising:
at least a concave mirror placed in such way that an incident traveling distance of a light beam to the concave mirror is equal or substantially similar to a reflective traveling distance of the light beam from the concave mirror, wherein any titling errors carried in the light beam as a result of structure errors in the module are compensated by the light beam going to and reflecting from the concave mirror; and
at least N optical filters, each specified for one of the N channels, wherein the concave mirror is placed right after one half of the N optical filters.
2. (*Cancelled*)
3. (*Currently amended*) The module as recited in claim 21, wherein the titling errors are symmetrically compensated.
4. (*Original*) The module as recited in claim 3, wherein the concave mirror has a shape substantially similar to a portion of a sphere, the titling errors successively introduced by a first half of the N filters are successively reduced over a second half of the N filters.
5. (*Original*) The module as recited in claim 3, wherein the concave mirror has a shape substantially similar to a portion of an oblate spheroid, the titling errors successively introduced by a first half of the N filters are successively compensated over a second half of the N filters.

6. *(Original)* The module as recited in claim 1, wherein the concave mirror is made in accordance with a sphere or an oblate spheroid.

7. *(Original)* The module as recited in claim 1, wherein the concave mirror has a shape in accordance with a sphere or an oblate spheroid.

8. *(Original)* The module as recited in claim 1, wherein each of the titling errors includes an angular error and a lateral shift error as a result of one of the N filters being tilted.

9. *(Original)* A multiplexing/ demultiplexing module configured N channels, the module comprising:

at least N optical filters, each specified for one of the N channels and transmitting an in-band signal and reflecting all out-band signals; and

N concave mirrors, each placed in front of one of the N optical filters to receive the out-band signals for correcting titling errors carried in the out-band signals as a result of the one of the N optical filters being tilted.

10. *(Original)* The module as recited in claim 9, wherein the concave mirrors are all in identical shape.

11. *(Original)* The module as recited in claim 10, wherein the shape is in accordance with a sphere or an oblate spheroid.

12. *(Original)* The module as recited in claim 10, further comprising N collimators, each associated with one of the N optical filters and receiving the in-band signal of the one of the N optical filters.

13. *(Currently amended)* A method for making a multiplexing/demultiplexing module configured N channels, the method comprising:

providing at least a concave mirror; and

placing the concave mirror in such way that an incident traveling distance of a light beam to the concave mirror is equal or substantially similar to a reflective travelling distance of the light beam from the concave mirror, wherein any titling errors carried in the light beam as a result of structure errors in the module are compensated by the light beam going to and reflecting from the concave mirror; and
providing a first half of N optical filters for multiplexing/demultiplexing a first half of the N channels, each of the N optical filters specified for one of the N channels and transmitting an in-band signal and reflecting all out-band signals.

14. *(Cancelled)*

15. *(Currently amended)* The method as recited in claim 13~~X~~, wherein the out-band signals from the first half of N optical filters are impinged upon the concave mirror and reflected as a reflected beam that goes through ~~the~~ a second half of the N optical filters for multiplexing/ demultiplexing a second half of the N channels.

16. *(Original)* The method as recited in claim 15, wherein titling errors successively introduced by the first half of the N filters are successively compensated as the reflected beam goes through the second half of the N filters.

17. *(Currently amended)* The method as recited in claim 16, wherein the at least one concave mirrors, when there are more than one, are all in identical shape.

18. *(Original)* The method as recited in claim 17, wherein the shape is in accordance with a sphere or an oblate spheroid.

19. *(Original)* The method as recited in claim 16, wherein each of the titling errors includes an angular error and a lateral shift error as a result of one of the N filters being tilted.